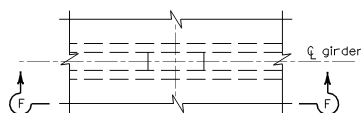
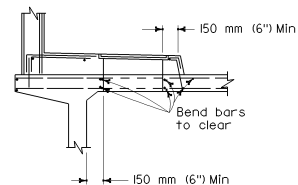
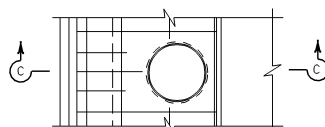


ELEVATION F-F

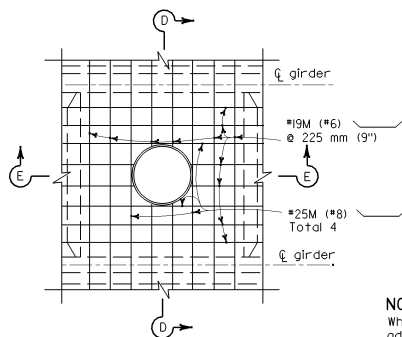
PART PLAN  
GIRDER STEM ACCESS OPENING  
DETAIL U41

SECTION C-C

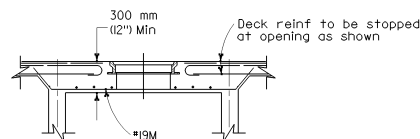
PART PLAN  
SIDEWALK ACCESS OPENING  
DETAIL U42

## NOTES:

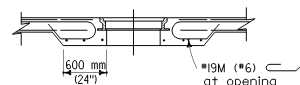
1. For exact location of openings see other sheets.
2. Location and size of manholes may be modified as directed by the Engineer, provided minimum dimensions are maintained.
3. All reinforcement detailed to be placed in addition to reinforcement shown on other sheets.



PART PLAN

DECK ACCESS OPENING  
DETAIL U43

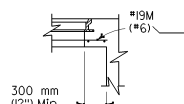
SECTION D-D



SECTION E-E

## NOTE:

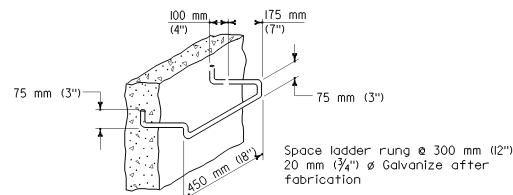
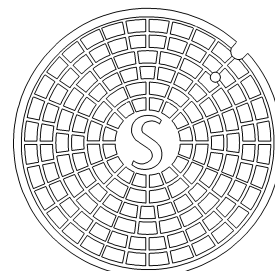
Where manhole is located adjacent to a diaphragm or abut, substitute Half Section E-E on one side of Section E-E.



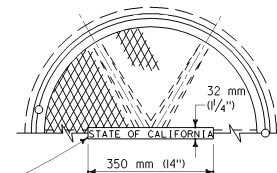
HALF SECTION E-E

## NOTES:

1. The manhole frame and cover shall be made of gray cast iron. Mass for payment is 200 kg (435 lbs).
2. All parts of the manhole frame and cover except machined surfaces shall be coated with asphaltum paint.
3. The manhole frame and cover shall be tested for accuracy of fit and shall be marked in sets before delivery. The cover shall fit the frame snugly but not tightly.
4. Covers for use on sewer structures shall bear the letters "S"; on storm drain structures the letter "D"; on openings for utilities the letter "U".
5. The mass shall not vary more than ten percent from the mass for payment.
6. Step Inserts may be substituted for the standard step detail. Step inserts shall comply with State Industrial Safety requirements.

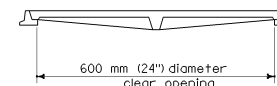
BAR STEP  
LADDER RUNG DETAILS  
DETAIL U44

TOP OF MANHOLE COVER

SECTION THROUGH FRAME  
NON-ROCKING MANHOLE FRAME & COVER  
FOR DECKS  
DETAIL U45

Letters 25 mm (1 inch) high. No other inscription to appear on exposed surfaces.

TOP OF MANHOLE FRAME &amp; COVER



SECTION THROUGH FRAME &amp; COVER

MANHOLE FRAME & COVER  
FOR SIDEWALKS  
DETAIL U46

## NOTE:

Frame and cover shall be cast iron. Mass for payment is 110 Kg (235 lbs).

Galvanize complete assembly after fabrication. The mass shall not vary more than ten percent from the mass for payment.

Cover shall be supplied with bolt down or locking devices.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

## UTILITY DETAILS

These "Standard Plans for Construction of Local Streets and Roads" contain units in two systems of measurement: International System of Units (SI or "metric") and United States Standard Measures shown in the parentheses ( ). The measurements expressed in the two systems are not necessarily equal or interchangeable. See the "Foreword" at the beginning of this publication.

NO SCALE

B7-11

DIST.	COUNTY	ROUTE	KILOMETER	POST	SHEET	TOTAL
					NO.	SHEETS

REGISTERED CIVIL ENGINEER

July 1, 2002

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: <http://www.dot.ca.gov>

REGISTERED PROFESSIONAL ENGINEER

Madhesh Raghavendrachar

No. C51119

Exp. 9-30-05

STATE OF CALIFORNIA